years ago. Outside the municipal boundaries of province and district centers are subdistricts and villages called *bucak* and *koy*. These can range in size from fewer than 50 people to several thousand. The presence of municipal boundaries is more important than actual population size in determining a classification as city or village. In 1980 there were 36,155 sub-districts and villages.

Age Distribution

The estimate of the birthrate for 1982 was 32 births per 1,000 population. The deathrate was estimated at 10 deaths per 1,000 population. The average annual rate of natural increase was 2.5 percent between 1975 and 1980, which was the same as the rate of population growth since there is negligible emigration from Turkey. Turkish workers often travel to other countries for employment, however. The Federal Republic of Germany, for example, recorded approximately 1.5 million Turks seeking residence in 1980. But these numbers are not currently large enough to affect Turkey's population growth rate. Migration into the country is also minimal. Approximately 61,000 immigrants arrived in Turkey in 1978, or less than one percent of the population. By 1980, that number had dropped dramatically to only 221 persons. The U.S. Census Bureau estimates that there will be no measurable international migration into or out of Turkey through the year 2000.

Mortality in Turkey is an unusual combination of relatively low adult mortality and very high infant mortality. Infant mortality was estimated at 100 deaths per 1,000 live births in 1982. The leading causes of infant deaths in Turkey are infectious diseases such as pneumonia and diarrhea. The U.S. Census Bureau estimates that life expectancy was only 59 for men and 62 for women in 1982 (vs. 70 for U.S. men and 77 for women). There has been a gradual increase in life expectancy since 1975, when it averaged 56 for men and 58 for women, but the short life spans persist due to high infant mortality, inadequate knowledge of preventive health care, and inaccessible medical facilities. There were only 822 hospitals and health centers in the country in 1979, and only one physician for every 1,700 Turks. Government policy is to deliver equal public health and preventive medical services to the entire population.

The 1980 census showed that 38 percent of the population was under age 15. Reflecting the low life expectancy, only 4 percent of the population was aged 65 and over in 1980.

Families

For most Turks, social life revolves around the family. The household is composed of kinsmen, and in some remote areas kin ties approach a tribal structure. Family loyalties override most other social obligations, and one's honor and dignity are traditionally tied to one's kinship group.

The traditional Turkish extended family consists of a man, his wife, his single and married sons and their wives and children, his unmarried daughters, and possibly a divorced or widowed relative. Despite the value placed on such family ties, only a small minority of Turks can afford to live in such a household. Most men do not have the wealth necessary to support such a lifestyle, particularly in rural areas where land is limited by inheritance rules.

In the traditional household, the husband's authority is greater than the wife's. Traditional sex roles determine behavior outside the home as well, much more so than in Western cultures. Turkish women often are segregated from the male mainstream of society.

The minimum legal age at marriage was 17 for men and 15 for women in 1975. Marriages are recognized by the government only if they have been performed through a civil (not religious) ceremony. Approximately three-quarters of all men are married by age 26 (by age 22 for women). In 1979, there was about one divorce for every eleven marriages in Turkey. "Incompatibility" (*gecimsizlik*) accounted for approximately 85 percent of the divorces that occurred in 1979. One-half of all divorces took place among couples without children.

The total fertility rate, or the average number of children born per woman, was 5.2 in 1975. The rate was slightly lower in urban areas (4.4 children per woman) and somewhat higher in rural areas (5.8 children per woman). Poor health conditions and the lack of medical service in rural areas account for the death of an average of two children per rural married woman aged 45 to 49.

Households

A household in Turkey is defined as one person or a group of persons with or without a family relationship who live in the same house or in the same part of a house, who share their meals, earnings, and expenditures, who take part in the management of the household, and who render services to the household. In 1975, the latest year for which data on households are available, there were 7.1 million households in Turkey, up from 6.3 million in 1970. While the number of households grew between 1970 and 1975, average household size declined from 5.4 persons per household to 5.1 persons per household. Rural households included about one more person than urban households. Unlike in the U.S., where single-person households form one-quarter of all households, fewer than 4 percent of Turkish households consisted of only one person. One-third of all households included seven or more persons. Fifty percent of the population lived in households of seven or more persons.

Housing

In 1980, 139,000 dwelling units were built in urban areas, according to occupancy permits recorded with the State Institute of Statistics. One-quarter of these permits were registered in the three major cities of Istanbul, Ankara, and Izmir.

A dwelling unit is a separate and independent enclosure used for residence by a single person, a family or a group of persons, having a covered roof and separate access to a street, corridor, or a public thoroughfare. Dwelling units can be in either houses (*ev*) or apartment buildings (*apartman*). A house is a building intended for residential use with one or two dwelling units, regardless of the number of stories. An apart-

ment building includes three or more dwelling units, regardless of the number of stories.

The number of new houses built in urban areas increased from 25,000 in 1976 to 31,000 in 1980; the number of new apartment buildings rose from 77,000 to 108,000 during the same period. Thus, apartment buildings are being constructed at a faster rate than houses (an increase of 41 percent vs. 23 percent). Apartment buildings currently account for three-quarters of the permanent housing stock being built in Turkish cities. All of these new dwelling units are reported to have piped water, electricity, and sewerage. The presence of complete kitchen facilities and bathrooms also are reported for all units. Central heat is used in only a small proportion of all units. Fifty-five percent of the new dwelling units constructed in 1980 had four or more rooms.

These statistics do not include the large number of shanties that have sprung up in the wake of extensive rural to urban migration. For example, unofficial estimates are that one-half of Ankara's population lives in shantytowns on the steep slopes surrounding the city. An unwritten law allows squatter shacks to flourish quickly: once a man puts a roof on four walls, he has claim to a home from which he cannot be evicted. With this knowledge, a peasant arriving from the countryside locates a piece of vacant land in a squatter village and erects the walls. Then with the help of friends or family already in the area, he puts the roof on overnight. These houses are called *"gecekondu"* — literally, "built overnight." Most of them lack electricity and the occupants buy water that is sold from cans on donkeys' backs. According to the United Nations, 65 percent of the population of Ankara lives in gecekondus; 45 percent of Istanbul's and 35 percent of Izmir's population lives in these homes.

A more accurate picture of the entire housing stock is reflected in data for households from the 1975 census. At that time, 57 percent of households had electricity, half of all households had running water, slightly less than one-half had private bathrooms, and about 60 percent had kitchens. In Istanbul, it is not unusual for the first floor of an apartment house to get water at 11:00 A.M., and the fourth floor at 1:30 P.M., before it is turned off at 9:30 P.M. Households often must collect their water at night for use the next day. Primary heating fuels are wood and coal. Eighty percent of households do not pay rent, reflecting some form of ownership or squatter status for the majority of the population.

Literacy and Education

"It is schoolmasters, and they alone, who can save the people." So said Mustaf Kemal, called Ataturk, (Father of the Turks), the leader who brought Turkey into the modern world. He also admonished Turks to cherish their culture, but to take from the West what is necessary for progress: "Admit science and new ideas into your lives. If you do not, they will devour you." Ataturk's success can be measured by the steady rise of literacy from 32 percent of the population in 1950 to 67 percent in 1980. About 79 percent of men are literate, compared to only about 53 percent of women.

The primary languages are Turkish, Kurdish, and Arabic. Over 90 percent of the population claims Turkish as their mother tongue. Ataturk was responsible for converting written Turkish from Arabic to Latin in 1928, which simplified the language and helped improve levels of literacy.

The Turkish educational system is composed of four parts: primary, secondary, higher education, and extended adult education. Primary education is the basic training lasting five years for all children between the ages of 6 and 14. Rural schools stress agricultural and handicraft skills. Approximately 95 percent of children aged 6 to 14 attend primary school. In 1980, 45 percent of the population aged 11 and over had completed a primary education.

Secondary education is intended to train people in professional and vocational fields to meet the country's labor force demands. It is divided into general education and vocational-technical education. General secondary education is a six-year program with two successive levels of junior high and high school. Four-year night high schools were opened in 1960 for people who could not attend school during the day.

Secondary vocational-technical training varies from two to six years in length, depending on the program. It is comprised of schools for each of the following major fields: men's technical training; girls' domestic science; teacher training; health; commerce and tourism; agriculture; Moslem religious teacher

continued

training; finance; police training; and conservatories for the fine arts.

Institutions of higher learning include academically autonomous universities and schools which provide training not available in universities. Fields of study include educational sciences; humanities; fine arts; law; social sciences; math and natural sciences; medical science; engineering; and agriculture. The country's commitment to greater educational access for its people is reflected in the fact that one-half of all graduates in 1978-79 took degrees in educational science.

In 1978-79, there were 65,000 graduates from universities and special schools. Although Ataturk declared that "the road of progress must be trodden by both sexes," there are still proportionately fewer female than male university graduates. In 1980, only 162,500 women had more than a high school education while 545,500 men were found to have attained a higher degree.

Labor Force and Income.

Turkey's labor force includes about 19 million people, not counting Turks employed abroad and those in the military. Fifty-five percent work in agriculture and 10.7 percent are in manufacturing. Wholesale and retail trade, transport, storage and communication, and community social and personal services form the next largest occupational categories (22 percent of the labor force).

The economically active population consists of persons aged 12 and over who, during the week preceding the census, worked to earn income in money or in kind; had a job but did not work because of illness, leave, etc., or were seeking work. Unemployed persons looking for work are included among the economically active. Persons economically inactive include retirees, students, housewives, and the disabled.

Until recently the excess labor force was encouraged to emigrate to look for work. An estimated one million Turkish workers currently are employed outside Turkey, many of them in Western Europe, but in recent years, movement to Europe has almost halted, and more workers have gone to Saudi Arabia and Libya. Exporting labor is not considered a viable long-term solution to Turkey's problems. One advantage is that Turkey's labor force has learned new skills and gained experience in factory work in northern Europe and the Middle East. Their travels have also encouraged them to be entrepreneurs and be receptive to new types of jobs.

Average daily wages in 1980 were 427 Turkish lira (equivalent of about $4.75 in U.S. dollars, at an exchange rate of 90.1 Turkish lira per dollar). Wages were highest in tobacco manufacturing (616 Turkish lira per day) and lowest in furniture manufacturing and personal service occupations (290 TL per day). Agricultural workers who were not unpaid family members averaged 376 TL per day. The regular work week consists of 48 hours, with paid annual leave of 12 to 24 days.

In 1980, 62 percent of the population aged 12 and over were economically active. Estimates are that the number of unemployed and underemployed may be 5 or 6 million persons. These numbers have grown as the job market remains stagnant and rural to urban migration increases. Another part of the unemployment problem arises from the large proportion of workers in agriculture. More than half the labor force is employed in farming and related jobs, and there is little work available between harvesting one crop and planting the next. Almost 70 percent of those in agriculture are unpaid family workers. Eighty-five percent of working women are unpaid family workers.

Per capita GNP was the equivalent of about $1,460 in 1980, according to the World Bank.

Transportation, Communications, and Consumption

In 1980, there were 711,000 automobiles and 134,000 motorcycles in use in Turkey. After World War II, the mileage of surfaced roads more than doubled. Sixty thousand kilometers of major, highways crisscross the country, about 90 percent of which are paved. All principal cities are connected by well-maintained roads, but much of the rural area does not have surfaced roads and cars are impractical in some areas.

Telephones are in short supply. The system is inadequate to the demand, and it sometimes takes several minutes to get a dial tone. The 16 cities which had about 20 percent of the total population in 1981 had nearly 70 percent of the telephones.

Radio and television stations are operated under government supervision. Radio broadcasting is provided by 26 stations covering almost 95 percent of the population. Television operates as a one-channel program broadcast from Ankara, and is transmitted to 60 percent of the country, or about 80 percent of the population. Urban households are more likely than rural households to own a television. The State Planning Organization is expected to make a decision soon on the adoption of color television. Commercial sponsors for television programs are prohibited, although radio and television accept advertising during specified time periods. Public attendance at movies is high, and intermissions often are used for advertising.

In 1976, 400 daily newspapers were published in Turkey, with a circulation of 1.5 million. The major Istanbul and Ankara newspapers with circulations of 100,000 to 500,000 are distributed throughout the country. Among the leading newspapers are *Hurriyet*, *Milliyet*, *Tercuman*, and *Cumburiyet*, published in Istanbul.

Sources of Information

Data from the 1980 one percent sample of the Turkish census are now available at the U.S. Census Bureau. The bureau also has compiled a 496 page report titled, *Detailed Statistics on the Urban and Rural Population of Turkey: 1950 to 2000*, (dated February, 1982). Questions about the report can be directed to co-authors James Spitler (301-763-5577) or Michael Roof (301-763-2834). Another U.S. census publication is the Country Demographic Profile on Turkey written by Peter Way and published in 1980. It can be ordered

from the U.S. GPO (No. ISP-DP-25).

The U.S. Department of Commerce published an Overseas Business Report titled "Marketing in Turkey" in October, 1979. It can be ordered for $1.25 from the U.S. GPO (No. OBR79-33) or from the Publications Sales Branch, Room 1617, U.S. Department of Commerce, Washington, DC 20230. The Commerce Department's desk officer for Turkey can be reached at (202) 377-2434.

The most recent Foreign Economic Trends analysis from the Department of Commerce is available from the same address for $1.50 (No. FET 82-060).

The Department of State's series of Background Notes includes a profile of Turkey dated September, 1979. This six-page summary can be ordered for 75¢ from the U.S. GPO as Department of State Publication No. 7850.

Also available from the U.S. GPO is the country study of Turkey conducted by the Foreign Area Studies staff at American University. Research for the report was completed in July, 1979; the book was published in 1980 (edited by Richard Nyrop), stock number 008-020-00832-0, $11.00. This 370 page volume contains chapters on the history, society, economy, government, and politics of Turkey.

The Turkish State Institute of Statistics publishes an annual statistical yearbook, the most recent of which is for 1981 (Publication No. 960). There is also a statistical pocket book for 1980 (Publication No. 930). Both can be purchased from the Printing Division of the Institute in Ankara. The address is:

State Institute of Statistics
Necati Bey Caddesi
114 Ankara
Turkey

Turkey is one of the nations in the Organization for Economic Cooperation and Development (OECP) so statistical publications of that organization (see May 1982 International Demographics) are often useful. The U.S. address for OECD is 1750 Pennsylvania Avenue, N.W., Washington, DC 20006. •

—Daphne Spain

Publications

La Population de la France Des Annees 80 by Michel Louis Levy, Paris: Hatier, 1982. 79 pp. (French only.)

France was the first nation to see its birth rate drop to replacement level and below. It was also the first to recognize the ensuing problems of decline and to develop public policy to encourage a more or less steady birth rate at replacement level.

In this book, Michel Louis Levy, head of publications for the National Institute of Demographic Studies, outlines France's demographic history, explains the country's current demographics, and makes projections for the future. He looks at birth and death rates, marriage, migration, and women's occupations.

Levy reflects the concern of French policy makers that the post-war birth rate should be sustained, or even slightly increased to 2.3 or 2.5 children, the actual rate between 1969 and 1973. Decades of coping with an "aging" population and concern for the solvency of the social security system have led France to its pro-natalist policy.

The most populous nation in Europe in the early 1800s, France's birth rate declined for 100 years. From 1919 to 1939, there was scarcely any growth, even with liberal immigration and naturalization policies. To meet the challenges of increasing the birth rate, France turned in 1939 to legislating economic incentives for childbearing, including subsidies.

These policies undoubtedly contributed to the post-war baby boom, but Levy says provisions tailored to the typical 1939 family, with its non-working wife, are outdated and need to be revised for the new majority.

Since 1981, over half of all French women have been working outside the home, and a decision to have a first child or an additional child is weighed against the wife's salary. In the 1970s France made contraception and abortion legal so that most women now make an explicit decision about a family and its size. It may be in the country's interest for women to choose to add a child, but it is also in the country's interest to keep women working; the modern French economy depends on it. The answer is to overhaul the system of taxes and benefits, and to offer flexibility in the work place so that women can manage both a job and a family, says Levy.

He proposes two ideas that have also been discussed in the U.S.: Joint municipal and employer provision of high quality, economical child care, and the use of improved communications technology to decentralize and disperse the work place so that women can work nearer their children. But he omits other options such as more flextime, part-time and shared positions, more favorable maternity leave policies which protect seniority and benefits, and more sharing of household responsibilities by fath[illegible] Levy believes nationally-pro[illegible] child care and direct payme[illegible]s to families, advocated by the political left and right respectively, are too costly to be adopted, however desirable.

Levy thinks that the "Easterlin effect" (where a relatively large age-cohort encounters more job competition, feels less secure economically as a result, and so opts for fewer children) accounts for a dip in fertility starting in the mid 1960s, when baby-boom children came of age. If Easterlin's theory that baby boom echoes baby bust is correct, the 1980s should be a favorable decade for an increase in fertility. But an increase will also depend on the economic climate and a social attitude more favorable to children.

If French society designs housing, city services, cars, hotels, restaurants and campgrounds with children in mind, if children get a better image in the media, if econ-

continued

omics favor them, children could be "a la mode" in the 1980s. Levy says that the 1970s were hostile to children in these respects.

The large-scale entrance of women into the work force has been the major demographic change of the late 20th century, and Levy considers that women are there to stay. The typical French woman is an office worker; her husband is more likely to be a blue-collar worker. Though the first baccalaureate degree awarded to a French woman was in 1861, today more women than men receive this degree, equivalent to the second year of college in the U.S. The degree opens access to office jobs. In every field, however, women still cluster in the lower status jobs, while men predominate at the higher levels.

In past decades the most striking feature of urban migration in France was metropolitan Paris—which swelled to 8.5 million, one-sixth of the French population. By 1975, this movement had slowed and towns under 100,000 were expanding the fastest. The agricultural and rural population continues to dwindle except for some "reurbanization." Center cities still are losing population, and suburbs are gaining.

Immigration to France was halted except for citizens of the European Community and refugees from Eastern Europe and Southeast Asia, which account for 60,000 immigrants and 30,000 naturalizations annually. The makeup of today's immigrant population is: Portuguese, 22 percent; Algerian, 21 percent; Spanish, 15 percent; Italian, 13 percent; Moroccan, 8 percent, Tunisian, 4 percent; black African, 2.3 percent.

Levy comments on the rise in births to unwed parents "who have not felt the need to stop by city hall," and on the modern citizens' expectation of a longer life and an earlier retirement age—a situation that French society will be unable to support much longer because of the growing imbalance of workers to retirees.

With some variations due to its unique history, France's demographic position today corresponds to that of other Western European countries and the United States. Levy's book, therefore, contains some lessons for all developed countries.

—Susan Robey

Index to International Public Opinion, 1980-81, Ed. by Elizabeth Hann Hastings and Philip K. Hastings, Westport, Ct.: Greenwood Press, 1982, 557 pp., $75.

A 1980 survey in Great Britain found that 40 percent of the respondents read books after they go to bed and only 10 percent watch television.

In 1980 Japanese respondents were asked whether advertisements in newspapers affected their buying habits for certain goods and services. The responses show that the advertisements that influenced people the most were for foods and beverages, books, department stores and supermarkets, travel, movies, clothes, and electrical appliances. Men were more influenced by ads for such products as automobiles and property, while women were twice as likely as men to be influenced by ads for such things as food, supermarkets, and clothes.

These are just two of the surveys reported in this annual volume which includes both single nation and multinational surveys on 24 topics ranging from business and industry, to recreation and entertainment, status and roles, government and the environment.

From this volume you can learn that of those surveyed in Brazil, men between the ages of 30 and 39 are most likely to spend their free time relaxing at home or taking one day trips to fish, hike or picnic, while men under 30 are slightly more likely than the older group to participate in team sports or attend a sporting event.

Sample Surveys of Current Interest. English. Statistical Papers, Series C, No. 15. 394 pp. UN Sales No. E.82.XVII.9. $US 20.00.

Fourteenth report in this series. The report describes or lists 465 surveys carried out in 59 countries or areas. An annex classifies surveys by subject. •

Foreign Investment/*cont. from p. 3*

ing prices for traditional exports, and a lack of diversification in the local economies, combined with a rapidly growing population, may keep per capita income down and with it the income available for consumer spending.

Other factors also may negate the profits from the growth areas. A tremendous boom may develop in country A in kitchen appliances, for example, leading to great profits for country B, the leading manufacturer and distributor of these products. Dividends are high and the stock rises rapidly. But the foreign investor does not profit. Why? Perhaps because of rules limiting foreign investment in local companies. Or perhaps because the currency of country A declines to the same degree as the stock appreciates. The local investor is happy with his profits, but the foreign investor ends up with no more dollars than he started with.

So demographics are only one factor that must concern the investor. Demographic changes are long-term in nature, so demographic information will not produce an overnight fortune.

But for the long-term investor it is important that all, or most, of the different factors be pointing in the same direction. There might be some ups and downs, but if all the trends are pointing up, the opportunity for long-term profit is much greater. Certainly, the investor who ignores demographic data is missing an important factor that fundamentally changes the economy and the truly spectacular investment opportunities that come from such fundamental changes. The investor does so at his peril. •

—Adrian Day

Adrian Day is the editor of the International Investment Letter *(1300 N. 17th St., Suite 1660, Arlington, VA 22209, $147) and author of* Investing Without Borders *(Alexandria House Books, 294 pp., same address, $19.95). In* Investing Without Borders, *Day examines stocks, banking, bonds, real estate and other investments in scores of countries, providing background information along with specific advice on the boom areas for the 1980s.*

1982 Cumulative Index

Indexes all articles and major book reviews (*) appearing this year. When searching under region or continent, the user should also consult individual country entries. "International" has been assumed for main subject headings unless otherwise qualified.

Advertising media, selection, D/1
Africa:
  family planning, J1/2
  government perception of population growth, J1/2;
Africa, Sub-Saharan:
  demographic characteristics, My/10*;
  development, My/10*
Africa, West:
  attitude surveys, O/10*;
  households, O/10*
Age data:
  age heaping, J1/3, 9;
  sources of error, J1/3, 9
Agricultural labor force, Ap/12
Asia:
  age distribution, O/2;
  rural-urban migration, O/2
Association of South East Asian Nations (ASEAN), J1/8
Australia:
  Census (1981), My/9;
  population, Ap/2;
  population density, Ap/2;
  urban density, Ap/2

Belize, J1/2
Brazil:
  age distribution, My/5;
  consumer attitudes, My/8;
  consumption, My/7–8;
  data sources, My/8;
  education, My/6–7;
  ethnic groups, My/5; N/2;
  health services, My/7;
  households, My/6;
  housing, My/6;
  income, My/7;
  labor force, My/7;
  population distribution, My/4–5
Bureau of Labor Statistics (U.S.)
  international labor statistics, J1/10;
  living costs, by city, J1/10;
  international productivity statistics, J1/10
Business International Corporation (firm), S/11

C.A.C.I. (firm), S/10
Cambodian baby boom, My/2
Canada:
  age distribution, J3/5, 7;
  appliances, My/9;
  census subdivisions, S/9;
  cities, Je/6;
  consumption, Je/8;
  data sources, Je/8, 11;
  education, Je/7;
  ethnic groups, Je/4–5;
  families, Je/7;
  family income, D/2;
  farm size, S/10;
  housing, Je/7;
  households, My/9; Je, 6–7;
  immigration, Je/4–5;
  income, Je/8; S/9;
  labor force, Je/7; S/9;
  languages, Je/9;
  population projections, J1/11;
  product labelling, Je/4;
  provinces, Je/6; S/9;
  women in labor force, Je/7–8;
  urban-rural population, Je/5;
Caribbean countries, Je/12
  demographic characteristics, Je/12;
  population, Je/12
Census Bureau (U.S.):
  computer software for developing countries, My/1;
  international divisions, Ap/10; N/2;
  international statistics, N/2;
  microcomputer technology, N/2;
  publications, A/10; N/2;
  Spanish-language program, N/2;
  technical assistance to developing countries, My/1
Census questionnaires, My/9
Censuses:
  bibliography, Ag/9*;
  country histories, Ag/9;
  recent (checklist), Ap/9
Childbearing incentives:
  Soviet Union, O/2;
  West Germany, O/3
China:
  Census (1982), Ap/2; My/9;
  status of demography, Ap/2;
  superstitions in marketing, Ap/11
Cities (25 largest):
  population, S/12;
  projections, S/12;
  rank, S/12
Computerized data files, N/2
Construction statistics, Je/9
Corporate advertising, D/2
Country rankings:
  agricultural labor force, Ap/12;
  fertility, Ap/12;
  growth rate, Ap/12;
  population, Ap/12;
  urbanization, Ap/12
Demographic data firms, S/10-11
Demographic transition, O/3, 11
Denmark:
  marriage, O/2;
  unmarried couples, O/2
Developing countries:
  Census Bureau (U.S.) statistics, Ap/10;
  computer market, My/1-2;
  indicators of development, Ap/12;
  market strategies, Ap/1–2;
  role of private enterprise, Ag/2;
  supermarkets, Ap/2
Direct mail advertising:
  limitations, O/9;
  regulations, O/8–9

Economic development, country comparisons, S/1
Elderly:
  cultural attitudes toward, Ap/11;
  growth rate by region, Ap/11
Employment, export-related, Ap/9, 11
Energy statistics, Ag/9*
Europe:
  baby boom, J1/2;
  housing, J1/2;
  television viewing, Ag/2
European Community:
  data collection, My/12, 11
  publications, My/12, 11

Family size preference, Je/9*; S/2; D/11*
Fertility:
  by continent, Je/9*;
  correlation with women's status, My/3;
  countries over 10 million, Ap/12;
  governmental policy, effects on, My/11;
  influence of workplace, S/2;
  interpretation, My/3
Foreign advisors:
  cultural constraints, S/3;
  personal skills, S/3, 8;
  personnel problems, S/3
Foreign Demographic Analysis Division (FDAD), Ap/10
Foreign investment:
  demographic factors, D/3, 11;
  non-demographic factors, D/11;
  timing, D/3
Fox, Robert (interview), Je/3, 11
France:
  birth rate, D/9*;
  childbearing policies, D/9*;
  demographic history, D/9*;
  immigration, D/10*;
  rural-urban migration, D/10*;
  women in labor force, D/9–10
Futures Group (firm), S/10

Gabon:
  imports, S/2;
  income, S/2
Gale Research, Inc. (firm), Ag/12, 1*
Germany, West:
  childbearing incentives, O/3;
  fertility rate; O/3;
  population projections, O/3
Gilbert Islands, My/9

Hispanics (U.S.), marketing to, Ag/11
Households, countries over 10 million, O/12
Hungary:
  age distribution, Ag/5–6;
  cities, Ag/4–5;
  consumption, Ag/8;
  data sources, Ag/10–11;
  divorce rate, Ag/4;
  education, Ag/7;
  families, Ag/6;
  "goulash socialism", Ag/4;
  households, Ag/6;
  housing, Ag/6–7;
  imports from U.S., Ag/4;
  income, Ag/8;
  industrialization, Ag/8;
  labor force, Ag/7;
  leisure, Ag/8, 10;
  population, Ag/4–5;
  population growth, Ag/4;
  regions, Ag/4–5;
  tourism, Ag/4;
  urbanization, Ag/5–6;
  women in labor force, Ag/7
Income, O/10
India:
  demographic statistics, Ag/9*; O/11*;
  green revolution, J1/12;
  industrialization, J1/12;
  middle class, Ag/10;
  population, O/11*;
  urbanization, J1/12
International Demographic Data Center, Ap/10

Japan:
  age distribution, J1/2;
  baby boom, N/3, 10–11;
  cities, N/4–6, 9;
  consumer attitudes, J1/11*; N/1, 3–5, 8, 10;
  consumer finance, N/11;
  cultural characteristics, Ag/9*;
  demographic characteristics, N/5;
  demographic data sources, N/10;
  education, N/7;
  emigration, N/2;
  food consumption, O/2;
  geographic divisions, N/4, 9
  housing, N/6–7;
  households, N/6;
  income, N/8;
  kitchens, marketing of, My/2;
  labor force, J1/2; N/7–8;
  leisure, N/8, 10;
  management techniques, Ag/9*;
  market penetration, N/1, 4;
  middle class, Ag/3, 10; N/4;
  migration patterns, My/2;
  regional markets, N/11;
  social trends, My/10;
  urbanization, N/5–6;
  women, J1/11; N/4–5, 10–11
Japan External Trade Organization (JETRO), N/1, 4, 7, 10
Job-sharing, Je/2
Johnson (S.C.) & Son, Inc. (firm), Je/2

Kenya:
  age distribution, S/5;
  cities, S/4;
  communication, S/8;
  data sources, S/8;
  education, S/6–7;
  ethnic groups, S/4;
  fertility, S/4–5;
  health services, S/6;
  housing, S/5–6;
  income, S/7;
  labor force, S/7;
  literacy, S/6;
  migration, S/5;
  political conditions, S/6;
  population, S/4, 6
  provinces, S/4–5;
  tourism, S/4;
  transportation, S/7
  urban-rural population, S/4
Korea, Republic of:
  age distribution, Ap/4;
  communications, Ap/7;
  consumer attitudes, Ap/8;
  consumption expenditures, Ap/8;
  data sources, Ap/8;
  education, Ap/7;
  households, Ap/4–5;
  income, Ap/7;
  labor force, Ap/7;
  population distribution, Ap/5–6

Labeling (See Product labeling)
Latin America:
  application of marketing techniques to U.S., Ag/11;
  fertility, My/3, Je/3, 11;
  labor force, Je/3, 11;
  political destabilization, Je/3, 11;
  population, Je/3, 11;
  population projections, Je/3, 11;
  women in labor force, My/3;
  urbanization, Je/3, 11
Liberia:
  age distribution, S/9;
  cities, S/9;
  data sources, S/9;
  fertility, S/9;
  population, S/9
Living costs, D/3

Marketing, O/10*
  direct-mail advertising, O/8–9;
  product labeling, Je/4; D/2;
  product simplification, Je/2;
  service industries, Je/1;
  test marketing, Je/2
Mexico:
  age distribution, O/4–5;
  census (1980), Ap/9;
  cities, O/5–6;
  consumption, O/7–8;
  data sources; O/8;
  economic prospects, O/8;
  education, O/6–7;
  emigration, O/4;
  fertility, O/4;
  housing, O/6;
  households, O/6;
  imports from U.S., O/4;
  income, O/7;
  labor force, O/7;
  languages, O/6–7;
  literacy, O/6–7;
  population growth, O/4–5;
  regions, O/5;
  urbanization, O/6
Middle class:
  definition, Ag/3;
  India, Ag/10;
  indicators, Ag/10;
  Japan, Ag/3, 10;
  Persian Gulf states, Ag/10;
  population, Ag/3;
  regional variations, Ag/3;
  shared characteristics, Ag/3;
  targeting, Ag/3
Military expenditures, Je/9*

Netherlands, Je/2
New Zealand:
  age distribution, S/10;
  birth rate, S/10;
  data sources, S/10;
  immigration, S/10;
  population, S/10

Organization for Economic Cooperation & Development (OECD):
  data collection, My/12;
  publications, My/12

Papua New Guinea:
  breweries, Ag/2;
  marketing tactics, Ag/2
Persian Gulf States:
  Indian communities, Ag/10;
  middle class, Ag/10
Political intelligence:
  definition, Ap/3;
  information gathering & assessment, Ap/3
Population:
  countries over 10 million, Ap/12;
  world, Je/2
Population growth:
  countries over 10 million, Ap/12;
  effects of technology, Ap/11*;
  effects on economic development, Ag/11;
  governmental perceptions, Ag/11;
  governmental policy, Ag/11;
  projections, Ap/11*
Predicasts (firm), S/11
Probe International (firm), Ap/3
Product labelling, Je/4; D/2
Public opinion, D/10*

Research International (firm), S/11
Research Publications, Inc. (firm), S/11
Russia (See Soviet Union)

Service industries, marketing of, Je/1
Social expenditures, Je/9*
Social insurance programs, My/11*
SRI International (firm), S/10–11
Singapore:
  age distribution, J1/5–6;
  census divisions, J1/4–5;
  communications, J1/7;
  data sources, J1/9;
  education, J1/7;
  ethnic groups, J1/5;
  fertility, J1/6;
  foreign trade, J1/4, 8–9;
  geographic distribution, J1/5;
  households, J1/6;
  housing, J1/6;
  imports from U.S., J1/8;
  income, J1/6–7;
  Japanese economic model, J1/8;
  labor force, J1/7–8;
  languages, J1/7;
  literacy, J1/7;
  population, J1/4–5;
  religious groups, J1/5;
  urbanization, J1/4;
  value systems, J1/8
Soviet Union:
  age distribution, O/1;
  censal periods, Ap/9;
  childbearing incentives, O/2;
  Census (1979), A/9;
  census quality, A/9;
  death rate, O/2;
  ethnic groups, O/1;
  exports, Ag/1;
  fertility, O/1;
  foreign trade dependance, Ag/1–2;
  imports, Ag/1–2
Statistical directories and indexes, Ag/12, 11
Supermarkets, Ap/2
Syria:
  fertility, J1/12;
  households, J1/12;
  population, J1/12

Total fertility rate (TFR), My/3, O/3
Transportation:
  effects on business, J1/1;
  traffic control, J1/1–2
Travel advertising, Ap/2
Turkey:
  cities, D/5;
  communication, D/8;
  data sources, D/8–9;
  demographic characteristics, D/6;
  education, D/7;
  ethnic groups, D/4–5;
  exports, D/4;
  families, D/6;
  fertility, D/6;
  housing, D/6–7;
  households, D/6;
  imports from U.S., D/4;
  income, D/8;
  literacy, D/7;
  migration, D/6;
  regions, D/5;
  religious groups, D/4–5;
  transportation, D/8;
  urban-rural population, D/5, 7

United Nations:
  demographic data collection, Je/10;
  demographic publications, Je/10–11;
  Population Division, Je/10–11
United Nations Fund for Population Activities (UNFPA), Je/10–11
Urbanization (countries over 10 million), Ap/12

Whipple's index, J1/3, 9
Women:
  data sources, My/3, 11;
  education, My/11;
  employment, My/11;
  social status, My/3, 11
World Fertility Survey, My/11; Je/9; S/2

Sources
The Population Reference Bureau

If you need demographic research but you're not ready to devote significant resources to it, a $100 institutional membership in the Population Reference Bureau (PRB) can be an inexpensive solution.

Founded in 1929, the PRB is the oldest private educational and research organization in the population field. Its work is based on the assumption that population change can cause problems, whether it's the rate of population growth in Zimbabwe or the pace of immigration into the United States. The PRB's goal is to supply facts with which individuals, groups, or governments can tackle these problems.

In its research and publications, the PRB casts one eye on demographic trends and their implications for the United States, the other on what is happening abroad. Half the annual *Population Bulletins* analyze American demographic trends, the other half world trends. This year's *Bulletins* included readable, concise, and thorough reports on population trends in the Soviet Union and on global childbearing. Next month a new *Bulletin*, *China: Demographic Billionaire*, will appear. Population Bulletins are sent automatically to members; nonmembers can order them for $3.00 each.

The PRB's regularly updated *Population Handbook* is a justly popular introduction to the basics of demographic analysis. In addition to the American edition, the PRB offers "international English," Spanish, French, Arabic, and Thai editions—available for $4.00 each.

Unquestionably the best buy among international demographic data sources is the PRB's annual World Population Data Sheet, now in its twentieth year of publication. Only $1.00—less for multiple orders—buys a colored 18½ inch by 24½ inch wall chart showing the current population, birth rate, death rate, life expectancy, and GNP per capita for all but the smallest countries, handily summarized by region, continent, and degree of development.

Along with data on population size and trends, the chart contains data that demographers value as indicators of a change in the direction of those trends: the proportion of the population that is urban, the proportion of the labor force engaged in agriculture, and the number of years it would take the population to double at the rate it currently is growing.

The information packed into this chart is so abundant that a reasonably clever researcher can mine it for a dozen factfilled reports or speeches without repeating a single topic. The PRB garners the information from the major sources of international data—the United Nations, the U.S. Census Bureau, and the World Bank—as well as from government reports, special studies and surveys, and communications with knowledgeable demographers and statisticians.

As anyone who has ever worked with international data knows, the PRB's work in reconciling numbers from sources that have different definitions, time frames, and statistical standards and practices makes this compilation the *ne plus ultra* of the field.

PRB membership also includes the bimonthly international population newsmagazine, INTERCOM. INTERCOM articles summarize new demographic research and report on population policies, trends, and data gathering around the world. A recent issue compared developing countries according to how many children the average couple wants, and appraised demographic trends in the Soviet Union.

You don't have to be a member to use the PRB's library, whether by mail, telephone, or visit. The PRB is enhancing its collection of demographic literature with on-line bibliographic searches of the two major population data bases: POPLINE, which primarily covers the biomedical aspects of population studies but also includes Population Index, the definitive population bibliography, and POPULATION BIBLIOGRAPHY, which emphasizes the socioeconomic aspects of population research. A small fee is levied to cover the cost of a search.

In an effort to expand its financial base—until now made up of membership donations—the PRB is capitalizing on its expertise and connections by establishing a Demographic Information Services Center (DISC).

DISC director Leon F. Bouvier says his group will respond to requests for information that go beyond the PRB librarians' resources and involve some calculations or research. Typical requests involve estimates or projections of the population by age for particular geographic areas of particular markets. Fees are based on the amount of work involved.

The PRB is as actively involved in education as it is in providing information. A separate department develops teaching tools for population topics like immigration trends and world population growth. Slides and wall charts illustrate population density in selected countries, world energy production and consumption, the growth of world urban centers and other current concerns. Many of the tools listed on the current Publications Order form could be as useful in a conference or board room as they are in a classroom.

The PRB works with the Population Resource Center to prepare briefings on current demographic issues for legislators and other policy makers. Copies of the executive summaries can be purchased and are listed on the publications order form. Most deal with population trends in the United States, but some touch on international trends too. To get the order form and membership information, write or call the Population Reference Bureau, Inc., 1337 Connecticut Avenue N.W., Washington, DC 20036; (202) 785-4664. •

—Martha Farnsworth Riche

C0200-1 1/10/83

INTERNATIONAL DEMOGRAPHICS™

Vol. 2, No. 1 January 1983

China Watchers Will Feast on Census Information

China's urban population is larger than U.S. experts had predicted. This was one unexpected finding from the preliminary results of the 1982 census in the People's Republic of China. Experts estimated an urban population of 139 million; instead 207 million urban residents were counted by the census.

John S. Aird, the U.S. Census Bureau's China expert, told a recent Census Table hosted by bureau director Bruce Chapman, that the Chinese have changed their definition of "urban," but they haven't yet explained how. In 1964, under the old definition, the census found the urban population to be 14 percent of the total population. The 1982 census put it at 21 percent.

The increase is not as great as it seems because the Chinese revised their 1964 figure upward when they released their 1982 data. Half the increase in urban population is, therefore, due to the change in definition.

A second surprise in the preliminary results was the increase in the proportion of males to females. The ratio now is 106, up from an estimated 105 based on registry data. Experts offer several possible explanations. It may be that female infanticide again has become common in response to China's one-child policy. It also may be, Aird said, that families do not report the birth of female children so they will not be prohibited from having a boy.

The census also found that minorities now constitute a greater proportion of the population. The 1964 census found that 5.8 percent of the population were minorities. The 1982 census found a 6.7 percent minority.

Aird said the minority population only recently came under China's family planning policies. Also, the government made a strong effort during this census to re-register as minorities people who have previously been registered as majority.

Aird, chief of the Census Bureau's Foreign Demographic Analysis Division, said Chinese people watchers are readying themselves for "a real feast," after many years of lean demographic data from China. Once the new computers finish processing the 1982 census, the Chinese plan to publish 31 volumes of data. They even expect to make unpublished data available to researchers, although whether that policy will include non-Chinese is not yet known.

The Undercount

Aird's personal estimate is that the undercount in China may have exceeded 5 percent. The Chinese claim that the national and provincial census totals show that the vital registration system is accurate, because the census total came within eight-tenths of a percent of official

Inside

Beware the cultural pitfalls 3
Republic of Indonesia: Adapting to change 4
Regions: Europe, Latin America, North America, Asia 10
Sources: International Labor Office 16

estimates based on the registration system.

However, Westerners mistrust the claim because even the Chinese have — until recently — complained that their registration system wasn't very good. People don't report deaths so that they can continue to collect benefits. They don't report births so they can circumvent the one-child policy. Moreover, the census was based on registry data, meaning households not registered for some reason would not have been counted. Post-enumeration surveys might not show errors because if a family concealed someone the first time around, they probably would do so a second time. Also, if local registry personnel found many errors, they would be admitting that they had not done a good job the first time. In addition, the government told local offices that if their error rate reached a certain count, they would have to retake the census at their own expense.

Leaping Forward

Even if the undercount is as high as 5 percent, Aird said, the 1982 census is a great advance for demographic statistics in China, because of both methodology and comprehensiveness. The census collected data the Chinese have not had before, such as the number of children ever born. A new classification system will provide new occupational data.

Undercount or no, Aird views the Chinese census as a monumental achievement which moves China into the mainstream of the modern demographic world. •

—Martha Farnsworth Riche

Around the World

Europeans Take To Microcomputers

West Germany is expected to be the single largest market in the next ten years for personal computers as Europeans install more than 18 million of the machines in their homes and offices by the end of 1985.

This is the prediction of International Resource Development, Inc., a market research firm, in a recently released report, "Microcomputer Markets in Europe."

IBM will probably emerge as the leading vendor in the office sector, while Commodore, Sinclair, and others appeal to the consumer market.

Translation of software and documentation for personal computer products has slowed the entry of new products into some parts of the European market. Both the French government and users want "Francized" software, and will fine companies $14 a word for using British or American terms. There is an approved list of translations which includes such words as infographie for computer graphics.

A new report from International Resource Development provides a detailed assessment of the European microcomputer market, including specific analyses and ten-year forecasts of the microcomputer market of France, United Kingdom, West Germany, Italy, the Benelux Countries, Scandanavia, Ireland, and Spain. The report also assesses strategies and opportunities in the European microcomputer market.

Further details on the report are available from International Resource Development, 30 High Street, Norwalk, CT 06851. Telephone toll free (800) 243-5008. From outside the U.S. or in Connecticut, call (203) 866-6914. Cost of the report is $1,450.

For Success, Get Global View

The president and chief executive officer of R. J. Reynolds Tobacco International, Inc. is telling students in business schools to gain international experience if they ever want to lead an American company.

"If you look at the profiles of those assuming positions as chief executive officers of major U.S. companies today," Lester W. Pullen told University of North Carolina students recently, "you will notice that more and more have spent part of their careers in international operations."

"In perhaps 10 years," he said, "it may be virtually impossible to rise to the top in any major American business without international experience."

R. J. Reynolds which had no overseas operations 25 years ago, now does business in about 160 countries.

Belgium is Land of Posters

Posters — what we in the United States are more likely to refer to as billboards — are an important advertising medium in Belgium, grabbing about 15 percent of the total media expenditures there in 1981.

There are various sizes of posters including about 5,000 two-square-meter ones found in bus-stop shelters. A new addition is the mobile "kangaroo" poster, mounted on the sides of a truck, able to roam the highways and park anywhere. They are reportedly best for short-term local use — advertising store openings, films, and special sales.

U.S. companies often shy away from outdoor advertising despite its proven effectiveness in some markets. When Pepsi used outdoor advertising to launch its one and a half liter bottle in Belgium, for example, it tripled its market share in a four-week campaign.

Source: *International Advertiser*, Sept./Oct. 1982, 615 W. 22nd St., Oak Brook, IL 60521. $15/year/bi-monthly. •

INTERNATIONAL DEMOGRAPHICS

Publisher: Peter Francese
Executive Editor: Bryant Robey
Editor: Doris Walsh
Managing Editor: Caroline Eckstrom
Research Director: Cheryl Russell
Art Director: Carol Terrizzi

International Demographics (ISSN 0731-5414) is published monthly by American Demographics, Inc., P.O. Box 68, Ithaca, N.Y. 14850. Telephone (607) 273-6343. © 1983 by American Demographics, Inc. All rights reserved. Subscription rate $148 a year.

Beware the Cultural Pitfalls

While demographic data may help determine the size or location of a potential market in a foreign country, the cultural forces at work also must be taken into consideration.

David C. Pring is director of the New York office of International Research, the Unilever-owned marketing research organization. He has been involved in market research in many countries including Nigeria and his native England. He recently spoke to participants at an International Demographics conference.

Q. What mistakes do marketers make when looking at foreign countries?

Pring: Either through lack of knowledge or simply without thinking, we assume things must be fundamentally the same everywhere. But, of course, things are different. It may seem simplistic, but when looking at overseas markets, it is important to constantly evaluate, "What is my product and who is my market?" and to presume nothing.

Q. What things do you need to know about overseas markets?

Pring: They fall into three categories. The first is general frames of reference — basically those local country factors that are necessary to appreciate no matter what the product. Here I include such items as population size and composition, religion, social culture, industrialization, regional variation, business style and the basic laws of the land.

The second is specific frames of references — the local country factors that are specific to the product and the market. For example, the nature of retail trade, the media profile, health care, etc., depending on which market one is interested in.

And the third thing is the practical considerations. How can I find out about the market? Who can help? Can I get the help here, abroad, or both? What will the quality be like? How easy is it going to be? Should I go and see for myself? And perhaps the most discriminating cultural difference of all — money. How much will it all cost?

Q. Where does language fit in?

Pring: I put language very high on the first list. As corporations extend their international marketing activities more widely over Southeast Asia, deeper into Africa, and start to break new ground in the People's Republic of China, a little French, Spanish, or German will not go far. The international researcher of the future probably will require a grounding in Mandarin to do a good job! Europe isn't as linguistically homogeneous as one might think. Despite its small land mass, it has at least 14 main languages. Switzerland, for example, has three — German, French, and Italian, but then it is their own version of these languages. And, of course, it is easy to forget that in an international marketing exercise, several languages may be involved just within the marketing companies and their subsidiaries.

Q. Is translation a problem?

Pring: Generally no, but of course direct translation is only one aspect of language. The conveyance of nuance and the use of the correct consumer language also is extremely important.

For example, in the Far East photographic film is not taken to be "processed," but to be "washed." "Too sweet" to a Nigerian can mean "very delicious" and "adequate" translates into Singapore English as "can do."

Some words can be translated but still be meaningless to natives. Recently we completed a survey in Kuwait where both local Kuwaitis and expatriate Indian and Pakistani workers were interviewed using the same questionnaire, appropriately translated. In describing products using a five point scale from "excellent" to "poor," the Kuwaitis used the "excellent" descriptor as well as "very good" while the Asians never went above "very good," probably because "excellent" was not a part of their vocabulary, rather than a measure of product difference.

Q. Besides language, what are some other factors one needs to consider?

Pring: The list is extensive. Take for example the role of women, which illustrates one of the major cultural dichotomies in the world marketplace. Traditionally market researchers in developed markets have directed their attention to the "homemaker," the housewife solely dedicated to home, husband, and family. This role and its associated stereotypes is changing in many Western societies as well as Japan.

Q. Is the role of women that different in other countries?

Pring: Consider the Arab woman. Because of Islam, the Middle East is the region most at odds with the rest of the world. Saudi Arabia is the extreme, with Gulf states such as the United Arab Emirates and Kuwait bridging the attractions of the Western world and the disciplines of Muslim fundamentalism. For the market researcher, this region is the most fascinating and problematic one in which to conduct surveys.

Q. Why?

Pring: Women do little of the shopping, but are important decision makers in writing the shopping list. Women are not permitted to work at most jobs, although I believe there is a bank for women run by women. For market research it generally means using male interviewers who are not, of course, permitted to interview women unless the husband or a chaperone is present. I know of one instance, where husbands were trained to interview their wives, in order to get certain data.

continued on p. 15

Country Profile

Republic of Indonesia

When President Reagan met with Indonesia's President Suharto in October, 1982, one topic they discussed was trade between the two countries. U.S. exports to Indonesia were about $2 billion in 1981. Indonesia, the world's fifth most populous country, is important to U.S. businesses. Indonesia's economy grew about 6 percent during 1982. Recent reports indicate that spending for development probably will be reduced in 1983 because of a generally weak economy.

Indonesia's 1980 census counted 146.7 million people who live on an archipelago of over 13,000 islands extending for 3,000 miles along the Equator from mainland Southeast Asia to Australia. The major islands are Java, Sumatra, Sulawesi (Celebes), the southern part of Kalimantan (Borneo) and Irian Jaya (West New Guinea). Indonesia shares land borders with Malaysia and Papua New Guinea.

Indonesia is the most highly volcanic region in the world. It has 100 active volcanoes, most of which are on the main island of Java. Volcanic ash from a recent eruption is still a problem in Bandung, a city of over one million. Residents are worried that when the dry season ends, the rain will cause destructive "ashslides." For now, the dust causes sanitary and health problems similar to the aftermath of Mount St. Helen's.

Population Growth

The Republic of Indonesia has conducted three censuses since its independence in 1945. Previous counts were taken in years ending with a "1" (1961 and 1971). But in an attempt to match other international census dates, this decade's census was taken in 1980. The figures for 1971 are thus not directly comparable to those for 1980.

Taking the 1971 population of 119.2 million at face value indicates that the population grew by 23.5 percent between 1971 and 1980. But the total in 1971 did not include approximately 68,000 homeless persons, an estimated 773,000 rural residents in Irian Jaya (where no census count was taken), nor the population of East Timor (estimated at 609,000 in 1970) which was annexed in 1976 and later became an Indonesian province.

The 1980 census included all geographic areas of the Republic. Many of the statistics used in this report are taken from a 10 percent subsample of a sample of the total census. The 1980 census is a more accurate count of the population than the 1971 census, which had an undercount of approximately 4 to 5 percent compared with about 2 to 3 percent in 1980 for the U.S.

The average annual rate of population growth was 2 percent during the past decade. The population will double in 35 years if the current rate continues. The U.N. projects that the growth rate will slowly decline in the coming decades. The population is projected to number 199 million in 2000.

Regions and Cities

The distribution of population over Indonesia's 27 provinces is uneven. In 1980, nearly two-thirds of the population was concentrated in the

INDONESIA

1 Aceh
2 North Sumatera
3 Riau
4 West Sumatera
5 Jambi
6 South Sumatera
7 Lampung
8 Bengkulu
9 Jakarta Raya
10 West Java
11 Central Java
12 Yogyakarta
13 East Java
14 Bali
15 West Nusatenggara
16 East Nusatenggara
17 East Timor
18 West Irian
19 West Kalimantan
20 Central Kalimantan
21 East Kalimantan
22 South Kalimantan
23 North Sulawesi
24 Central Sulawesi
25 South Sulawesi
26 Southeast Sulawesi
27 Maluku

•Cities of 500,000 or more population

BEST AVAILABLE COPY

six provinces on the islands of Java and Bali, only 7 percent of the total land area. Another 19 percent lived in eight provinces on Sumatra (25 percent of the land area).

Indonesia has a population density of only 199 persons per square mile, but Java and Bali are the most densely settled areas in the world. The average density in Java in 1981 was 1,787 persons per square mile. Some rural regions exceed 5,000 persons per square mile. Such high rural densities are possible because of the region's dependence on wet rice cultivation, which allows two or three rice crops per year. The most sparsely populated provinces are Central and East Kalimantan and Irian Jaya (West New Guinea) each with less than 26 persons per square mile.

Encouraging migration from densely populated Java to less populated areas (a program known in Indonesia as "transmigration") has received periodic governmental favor. The current 5-year development plan calls for 500,000 houses for transmigrants.

The provinces of Lampung (Sumatra) and East Kalimantan grew the fastest during the 1970s, each increasing about 6 percent per year. Other rapidly growing provinces were Bengkulu and Jambi (Sumatra), Jakarta (Java) and Central Sulawesi, all at about 4 percent per year.

For 50 years the Indonesian population has been moving from the inner islands of Java and Bali to the outer islands. Since 1930, the proportion of the population in Java-Bali has declined from 71 to 64 percent. But the capital city district of Jakarta, has increased its share of the national population from less than 1 percent in 1930 to 4 percent in 1980. The population of Jakarta was 6.5 million in 1980, up from 4.6 million in 1971. The U.N. projects its population will be 16 million by the year 2000.

Kabupaten and Kotamadya are terms for administrative areas below the province. Kabupaten corresponds roughly to our counties. Kotamadya are urban Kabupaten. The next lower administrative level is the *kecamatan* (township) and below that is the *desa* (village). There were 49 *kotamadya* and 246 *kabupaten* in 1980. Five *kota* (cities) had more than one million inhabitants: Jakarta (6.5 million); Surabaya (2 million); Bandung (1.4 million); Medan (1.4 million); and Semarang (1 million). Another 25 cities had populations of 100,000 or more in 1980.

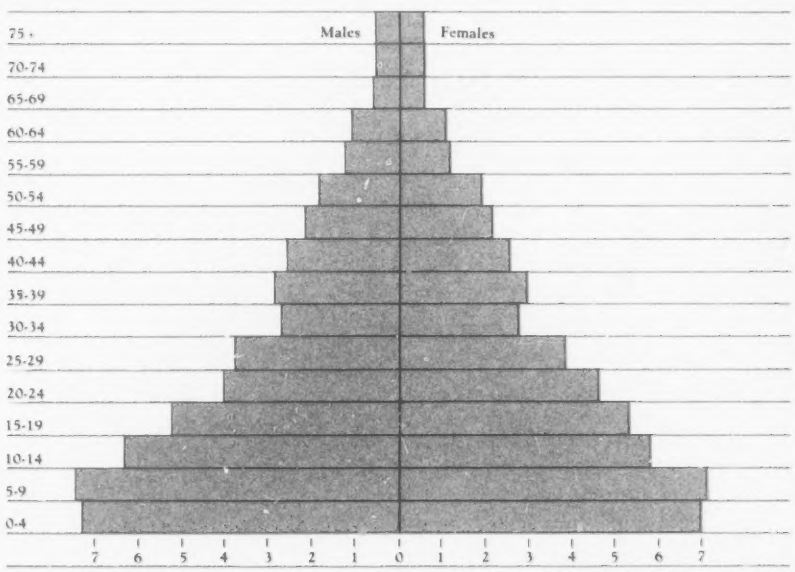
Definitions of urban and rural have changed since 1971. Villages that were classified as rural in 1971 were reclassified as urban in 1980 if they had a population density of more than 1,900 persons per square mile, had less than 25 percent of their population engaged in agriculture, and had at least 8 of 16 "urban facilities," such as a hospital or clinic, high school, and electricity. Because of these changes, comparisons with earlier census years are difficult. By the new definition, 22 percent of Indonesia's population were urban in 1980.

Ethnicity and Religion

At least 300 ethnic/tribal groups (with as many different languages and dialects) exist in Indonesia, and at least a dozen of these groups have more than 2 million members. Javanese are the largest ethnic group, with Sundanese and Madurese on Java forming the next largest groups. Ethnic Chinese make up the largest non-Malay group. Immigration officials estimate that there are over one million Chinese

Population of Indonesia, By Age and Sex, 1980

(in percent)



Age	Total	Male	Female
0- 4	21,049,945	10,760,699	10,289,246
5- 9	21,267,168	10,838,280	10,428,888
10-14	17,688,924	9,180,469	8,508,455
15-19	15,427,986	7,600,408	7,827,578
20-24	12,902,969	5,936,512	6,966,457
25-29	11,234,730	5,576,315	5,638,415
30-34	8,090,022	3,964,125	4,125,897
35-39	8,466,657	4,130,274	4,336,383
40-44	7,421,747	3,677,987	3,743,760
45-49	6,165,142	3,014,986	3,150,156
50-54	3,426,318	2,699,966	2,726,352
55-59	3,413,029	1,727,762	1,685,267
60-64	3,278,116	1,567,860	1,710,256
65-69	1,764,291	846,637	917,654
70-74	1,572,234	695,054	877,180
75 +	1,576,490	716,930	859,560
Not Stated	30,705	17,406	13,299
Total	146,776,473	72,951,670	73,824,803

Source: Biro Pusat Statistik, Jakarta, Indonesia.

in Indonesia, but only 400,000 were counted in the 1980 census. Most Chinese are resident aliens and are required to register periodically, but no attempt was made to examine identity cards in the census.

The official language is Bahasa Indonesia. However, only 12 percent of the population speaks Indonesian at home. Forty percent do not speak Indonesian at all, although many Indonesians are bi- or tri-lingual. Javanese is spoken by 40 percent of the population, and Sundanese, by 15 percent of the population. Six other languages are spoken by 15 percent of the population, and 18 percent of the population speaks a variety of languages listed in the 1980 census simply as "others." Bahasa Indonesia and Javanese predominate in urban areas, but rural areas and villages are ethnically homogeneous and account for 90 percent of those who speak "other" languages.

English is the official second language and is taught in the schools, but English is spoken only in the major cities. Even for those working in the countryside who know Bahasa Indonesia or Javanese, a local translator is often necessary to interpret dialects. New Yorkers may complain about southern accents in the Sun Belt, but Americans seldom need interpreters to do business in different parts of their own country.

This ethnic diversity is not accompanied by religious diversity: Nearly 90 percent of Indonesians are Muslims, the largest Muslim population in the world. Indonesians practice a relaxed version of Islam. Women, for example, are seldom seen wearing the veil (purdah) so often seen in other Moslem countries. In the villages, drums call people to prayer because tropical foliage muffles the cries of the muezzin. Christians make up 8 percent of the population and Hindus (most of whom live in Bali) 2 percent.

Religious practices in Indonesia have a strong undercurrent of animism, as demonstrated by symbolic sacrifices and offerings to the gods. Rice plays an important role in Muslim ceremonies, reflecting its importance to the nation's economy.

Age Distribution

Accurate age information is difficult to get from a majority of Indonesians, especially from those who are illiterate or do not know their date of birth. Census enumerators often have to estimate a respondent's age, which creates "heaping" at years ending in a "0" or "5."* Enumerators are instructed to discover a person's age by relating it to a national or local event, such as the beginning of the Japanese occupation (1942) or Indonesian Independence (1945). Another source of error is deliberate misreporting — men generally overstate their ages while women understate theirs.

Approximately 40 percent of the Indonesian population is under age 15, twice that of the U.S. Another 32 percent of Indonesians are aged 15 to 34. Only 4 percent of the population is aged 65 or over. The United Nations estimated life expectancy for men at 49 years in 1980 and for women at 51 years.

Public Health

Chronic, widespread malnutrition and endemic tropical diseases contribute to the shorter lives of Indonesians. Water-borne diseases such as typhoid, hepatitis, and bacillary dysentary are serious health problems. High infant mortality rates of over 100 deaths per 1,000 live births were characteristic in the 1970s (vs. about 12 per 1,000 in the U.S.). Tuberculosis is a leading cause of death in the country.

The number of doctors increased from 7,600 at the beginning of the 1970s to 10,400 at the end. In some rural areas without physicians, people are cared for by *dukun*, traditional medical practitioners. The approximately 50,000 *dukun* function as midwives, circumcisors, masseurs, herbalists, exorcists, and fortune tellers. The government has tried to integrate *dukun* into the modern health system by training them in current medical and midwifery techniques.

In order to supplement the meager data on the health of the Indonesian population, the 1980 census asked several questions on health and medical treatment. Six percent of the population (8.8 million people) reported feeling unwell during the previous week. Of those, 90 percent sought some kind of treatment. One million people went to hospitals, 1.5 million to public health centers, and 1.3 million were visited by a health service worker. Another 2 million treated themselves. Almost as many ill people visited a *dukun* as visited a general practitioner.

Households and Families

A household in Indonesia is a group of people living in a building or dwelling unit who normally make common provisions for food and other essentials. "Normally" means that a person lives there most of the time. Guests who have stayed six months or more are considered members of the household in which they have been staying. The complexity of the Indonesian household is reflected in the variety of census categories for relationship to head of household. If not a wife or child, a household member might be a child-in-law, a grandchild, a parent or parent-in-law, other relative, servant, or "other" (possibly that lingering guest). In 1980, members of households other than head, wife, or child accounted for 15 percent of the population.

There were 30 million households in Indonesia in 1980, 20 percent of which were urban. Ninety percent of households occupied an entire dwelling unit, while about 7 percent of households shared a unit with one other household, and the remaining three percent shared a unit with two or more households. Urban households are more likely to be sharing a dwelling unit than are rural households.

Approximately one-half of all households consisted of fewer than five persons in 1980. Ten percent consisted of eight or more persons. Only 3 percent of households are single-person. Urban households are slightly larger on average than rural households. Median household size in urban areas is 5.4 compared to 5.0 in rural areas.

**For a more thorough explanation of the problems of age heaping, see "Measuring the Accuracy of Age Data," International Demographics, July, 1982, p. 3.*